

REMARKS

The Official Action of June 12, 2003, and the prior art cited and relied upon therein have been carefully studied. The claims in the application are now claims 1-14 and 16-18, claim 15 having been deleted above. Applicant's claims define novel and unobvious subject matter under § 102 and 103 for the reasons pointed out below, and these claims should be allowed. Accordingly, the applicants respectfully request favorable reconsideration and allowance.

Acknowledgement by the PTO of the receipt of applicants' papers filed under Section 119 is noted.

Prior to addressing the rejections and the prior art, applicants respectfully note certain amendments made above in the claims. Thus, claim 1 has been amended to specify the wavelength of the writing light, support being found in applicant's specification at page 2, second paragraph. Claims 2, 3, 9, 10, 16 and 17 have been amended to specify the counterions X_1 and X_2 , support being found in applicant's specification in the paragraph spanning pages 10 and 11.

Claims 15-17 have been rejected under §102 as anticipated by the Hamer publication, Reference U (Hamer). This rejection is respectfully traversed.

Claim 15 has been deleted, so the rejection need not be further addressed with respect to claim 15. Claims 16 and 17 have been amended to specify the counter ions X_1 and X_2 , features not disclosed by Hamer.

The rejection states that the dyes disclosed in Hamer are the same class of dyes shown in formulae 1-20 of the present application or include the cyanine dyes of the claimed invention. However, Hamer does not disclose a cyanine dye as called for in claims 16 and 17, defining a specific counter ion. In particular, even the cyanine dyes VIII and XIX disclosed in pages 252 and 267 of Hamer differ from the claimed cyanine dyes in their counter ion.

Hamer has not been applied alone against claims 16 and 17 under §103, and applicants agree that Hamer would not have made obvious applicant's dyes as recited in claims 16 and 17. In this regard, applicants respectfully note that, when Hamer was published in 1964, optical recording media had not yet been developed. Accordingly, it would not have been obvious to modify Hamer's cyanine dyes to obtain applicants cyanine dyes which are particularly adapted to be efficiently used in optical recording media.

Withdrawal of the rejection is in order and is respectfully requested.

Claims 1, 2, 4-7, 15, 16 and 18 have been rejected under §102 as anticipated by Ueno et al USP 5,939,163 (Ueno). This rejection is respectfully traversed.

The rejection states that comparative example 1 in column 14 of Ueno discloses a compound embraced by Formula 1 of applicant's claims, and is used in an optical recording medium. However, as pointed out above, claims 2, 3 and 16 have been amended to specify the counter ion in Formula 1. Contrary to applicant's claims, the compound disclosed in comparative example 1 of Ueno does not have any such counter ion, and therefore is not embraced by applicant's claims.

Claim 5 was criticized as reciting an intended use. This would apply to the feature added at the end of claim 1. However, applicant disagrees that such a recitation involves only an intended use. Instead, the recitation defines the optical recording medium recited, and not an intended use, because it defines a characteristic of the dye, e.g. in claim 1 the dye in claim 1 must have an absorption maximum longer than that of the writing light. The same is true for claims 5 and 6 where the absorption maximum must be even longer.

The rejection indicates that dye 21 disclosed in Table 2 of Ueno is comparable to formula 34 of the instant specification. However, in compound 34 of the instant application, "Y", "R3", "R4" and "MZ" are "O", "H", "N(C₂H₅)₂" and "Ni²⁺", respectively, while those in the dye 21 of Ueno are

"OH", "OC₄H₉", "N(CH₃)₂", and "ZnCl₂", respectively. The dye 21 of Ueno is not the same as the compound 34 of the instant application, and there is no anticipation.

Withdrawal of the rejection is in order and is respectfully requested.

Claims 1, 2, 5-7, 15 and 16 have been rejected under §102 as anticipated by Namba et al USP 4,412,231 (Namba '231). Applicants are uncertain that they understand this rejection. Certainly, the PTO cannot be taking the position that a general disclosure of the type set forth in Namba '231 anticipates everything, including everything novel, falling within that general disclosure.¹ However, if this is the position of the PTO, it is most strenuously (but respectfully) traversed.

The rejection does focus on NK and IR dyes of table III, but applicants have no idea what these are. Indeed, there is no indication of whether these are even cyanine dyes, let alone cyanine dyes corresponding to applicant's formula. Applicants respectfully note that the initial burden is on the PTO, noting MPEP 706.02(j), and the PTO has not met its burden in this regard in view of the absence of any disclosure of what

¹ This would be analogous to holding that the first person who invented the first hammer, e.g. a claw hammer, and disclosed same and broadly claimed a "hammer", would anticipate all other hammers coming thereafter, regardless of structure. This is clearly not correct.

the NK and IR dyes of table III of Namba '231 are. Applicants believe that applicant's dyes are novel over any dyes disclosed in table III of Namba '231.

Applicants respectfully request withdrawal of the rejection.

Claims 1, 2, 5-9 and 12-16 have been rejected under §103 as obvious from Namba '231. This rejection is respectfully traversed.

First, as regards claims 1, 2, 5-7, 15 and 16, the rejection is inconsistent with the rejection under §102, discussed immediately above, over the same reference. Claimed subject matter cannot be both anticipated by and obvious from the same prior art disclosure. If one is correct, then the other is incorrect. In this case, both are incorrect.

Next, the rejection states that it would have been obvious to one of ordinary skill in the art to use short wavelength lasers with the media exemplified in Namba '231, with a reasonable expectation of achieving useful storage data based upon the Namba '231 disclosure and the absorption spectra of the recording layers. However, as mentioned above, Namba '231 does not disclose the cyanine dyes as called for in applicants' claims, i.e. there is no evidence that the NK and IR dyes of table III are even cyanine dyes, let alone

applicants' cyanine dyes, and there is no reasonable certainty of inherency.

Furthermore, there is nothing in Namba '231 to suggest that any dyes, let alone applicants' cyanine dyes, are useful for an optical recording medium on which data is recorded with a writing light having a wavelength of 600nm or shorter. Applicants' claims are not made obvious by Namba '231. Applicants respectfully request withdrawal of the rejection.

Claims 1, 2, 5-9 and 13-16 have been rejected under §102 as anticipated by Nanba et al JP 60-204396 (Nanba JP'396). This rejection is respectfully traversed.

As correctly stated in the rejection, the wavelength used in recording with respect to dye D32 and D36 of Nanba JP'396 is 830nm. Contrary to Nanba JP'396, the wavelength used in the present invention is 660nm or shorter, and this defines a characteristic of the dye.

In addition, the optical recording media disclosed in Nanba JP'396 is characterized by the use of 2 or more cyanine dyes, at least 1 of which has a maximum wavelength of absorption ranging from (A-40)nm to (A+70)nm. Contrary thereto, the claimed optical recording media do not require such condition. It is believed that the optical recording media of Nanba JP'396 is different from the claimed invention.

Furthermore, it should be noted that the dyes D32 and D36 relied upon by the PTO are different from the cyanine dye as defined in applicants' claims.

Nanba JP'396 does not anticipate any of applicants' claims. Applicants respectfully request withdrawal of the rejection.

Claims 1, 2, 5-9 and 12-16 have been rejected as obvious under §103 from Nanba JP'396. This rejection is respectfully traversed.

As regards claims 1, 2, 5-9 and 13-16, the rejection is inconsistent with rejection of the same claims over the same reference under §102. As stated above, if the claims are anticipated, they cannot be obvious; and if they are obvious from a citation, that citation does not anticipate such claims. In the present case, Nanba JP'396 neither anticipates nor makes obvious the subject matter of claims 1, 2, 5-9 and 13-16.

The rejection states that it would have been obvious for one skilled in the art to use other disclosed cyanine dyes from the table on pages 9-14 and to use these with appropriate disclosed lasers, which have emissions at wavelength up to 70nm shorter than the maximum absorption of the dyes. However, Nanba JP'396 does not disclose applicants' cyanine dyes, let alone that such dyes are useful for optical recording media on

which data is recorded with a writing light having a wavelength of 660nm or shorter.

Accordingly, Nanba JP'396 does not make any of applicants' claims obvious. Applicants respectfully request withdrawal of the rejection.

Claims 1, 2, 5-9 and 12-16 have been rejected under §102 as anticipated by Umehara et al JP08-156408 (Umehara). This rejection is respectfully traversed.

The rejection is based on dyes B1 and B2 of Umehara. However, these dyes B1 and B2 of Umehara do not correspond to applicants' dyes, particularly noting the presence of the counter ion now specified.

Applicants respectfully request withdrawal of the rejection.

Claims 1, 2, 5-9 and 12-16 have been rejected under §102 as anticipated by Aihara et al EP 0676751 (Aihara). This rejection is respectfully traversed.

The rejection states that the Aihara disclosure of examples 1-7 in table 1 on pages 21 and 22 are used in recording media with recording data at 680nm and 780nm. Even so, this does not correspond to applicants' claims, i.e. the optical recording media as defined in applicants' claims are those on which data is recorded with light having a wavelength

of 660nm or shorter. It should be clear that the optical recording media as disclosed in Aihara are not the same as those claimed, and therefore Aihara does not anticipate any of applicants' claims.

Moreover, the dyes *per se* disclosed in Aihara are not embraced by applicants' claims because the claims have been amended to specify the counter ion.

Applicants respectfully request withdrawal of the rejection.

Claims 1, 2, 4-7, 15, 16 and 18 have been rejected under §102 as anticipated by Suzuki et al USP 6,214,519 (Suzuki). This rejection is respectfully traversed.

The rejection as stated is rather cryptic, but applicants understand the PTO position to be that Suzuki anticipates applicants' azo dye embodiments by the disclosure at columns 6-11, 13 and 14; and anticipate applicants' cyanine embodiments by the disclosure at column 15. The PTO also relies on the examples using such dye embodiments.

However, Suzuki's teaching with respect to azo dyes is contrary to the present invention, and therefore there can be no anticipation by Suzuki. In this regard, attention is respectfully invited to column 12, lines 2-11 which clearly states that the azo dyes of Suzuki must be have an absorption maximum at a wavelength **shorter** than the recording light, i.e.

"a wavelength side shorter by from 40 to 60nm than the recording/reproducing beam wavelength." Contrary thereto, the azo dyes of applicants' invention have an absorption maximum at the wavelength longer than the recording light.

As regards any disclosure in Suzuki of any cyanine dyes, applicants do not see any such disclosure which anticipates any of applicants' cyanine dyes, especially taking into account the claimed counter ion.

Suzuki does not anticipate any of applicants' claims. Applicants respectfully request withdrawal of the rejection.

Claims 1, 6-8 and 13-15 have been rejected under §102 as anticipated by Ozawa et al USP 4,769,307 (Ozawa). This rejection is respectfully traversed.

Again, the rejection is somewhat cryptic, but applicants understand the rejection to be based on the disclosure in Ozawa of the use of a 780nm laser as a writing light. However, this is contrary to the present invention wherein the optical recording media of the present invention use a 660nm or shorter wavelength light as a writing light.

As Ozawa does not anticipate any of applicants' claims, applicants respectfully request withdrawal of the rejection.

Claims 1-3, 5-7 and 15-17 have been rejected under §102 as anticipated by Kanno GB 2329751 (Kanno). This rejection is respectfully traversed.

The rejection relies on examples and comparative examples 1 and 2 of Kanno. However, applicants do not see any examples of Kanno which anticipate any of applicants' claims, and this concerns both the dyes as well as the optical recording media.

Applicants respectfully request withdrawal of the rejection.

Claims 1, 8 and 15 have been rejected as anticipated by Suzuki et al USP 4,730,902 (Suzuki '902). This rejection is respectfully traversed.

As pointed out in the rejection, example 4 of Suzuki '902 uses dye 10 in a medium which is recorded using an 830nm laser. This does not correspond to applicants' claims wherein the optical recording media of the claimed invention uses a writing light having a wavelength of 660nm or shorter.

As Suzuki '902 does not anticipate applicants' claims, the rejection should be withdrawn. Such is respectfully requested.

Claims 1, 4-8, 11-15 and 18 have been rejected under §102 as anticipated by Yoshikawa et al USP 4,686,143 (Yoshikawa). This rejection is respectfully traversed.

The rejection relies on example 6 of Yoshikawa. However, it should be noted that the azo dye used in Example 6 of Yoshikawa have "hydroxy-" or "carboxy-" residues at the position "Z" in the general formula recited in column 13, lines 44-62. Contrary thereto, it is "phenol hydroxy group", "sulfinio group" or "sulfo group" in the azo dyes as defined in the amended claim 18 to be bound at the position corresponding "Z" in Yoshikawa's azo dyes. In this regard, the azo dyes disclosed in Yoshikawa are not embraced by the claimed invention.

Moreover, Yoshikawa does not suggest the use of the azo dyes in an optical recording medium.

Yoshikawa does not anticipate any of applicants' claims. Accordingly, applicants respectfully request withdrawal of the rejection.

Claims 1-18 have been rejected as obvious under §103 from any of the references discussed above, in view of Namba '231.² These ten (10) rejections are respectfully traversed.

² First, applicants assume that the Examiner's reference to "any of the above cited references" does not refer to Namba '231 itself; otherwise, the rejection would be based on Namba '231 in view of Namba '231, which doesn't make any sense. Second, as understood, this constitutes ten (10) different rejections based on §103. This is an excessive number of rejections, inconsistent with MPEP 706.02, under the heading "Choice of Prior Art; Best Available" appearing at page 700-20 of Revision 1, Feb. 2003.

First, the references are deficient individually for reasons pointed out above. Applicants do not see that Namba '231 makes up for the deficiencies of the other citations. Therefore, even if the proposed combinations were obvious, not admitted by applicants, applicants' invention would not be reached by modifying any of the ten (10) primary references by anything taught by Namba '231.

Applicants also submit that the proposed combinations would not have been obvious as the prior art provides no motive or incentive, reason or purpose, teaching or suggestion for the proposed combinations. In other words, there is nothing in the prior art **leading** the person of ordinary skill to make the proposed combinations.

Applicants' claims would not have been obvious from a consideration together of Namba '231 with any of the other ten (10) references. Applicants respectfully request withdrawal of these rejections based on §103.

Claim 1 has been rejected on twelve (12) different prior art bases. Claim 2 has been rejected on ten (10) different prior art bases. Claim 15 has been rejected on fourteen (14) different prior art bases. Applicants' respectfully complain that such cumulative rejections are not only unduly burdensome to the applicants, but are clearly inconsistent with MPEP 706.02. Hopefully, all the rejections

are overcome and the present application will now be allowed.
However, if any rejections are to be repeated, applicants
request compliance with MPEP 706.02.

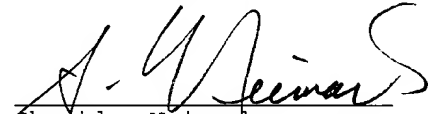
The prior art documents of record and not relied upon
have been noted along with the implication that such documents
are deemed by the PTO to be insufficiently pertinent to warrant
their applications against any of applicant's claims.

Applicants respectfully request favorable
reconsideration and allowance.

Respectfully submitted,

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